

# The Rudd Center

## Yale University

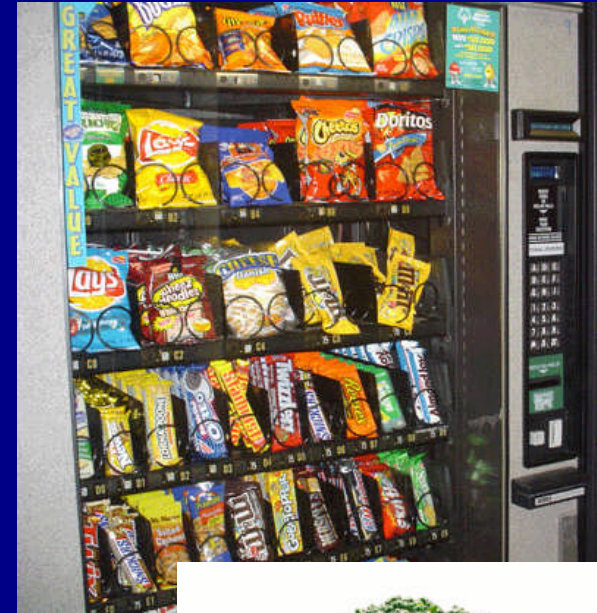
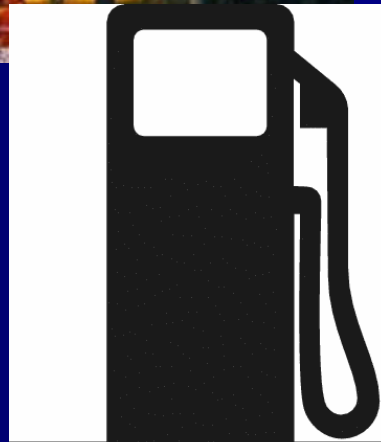


- Strategic science
- Research on
  - food marketing to youth
  - soft drink taxes
  - school and pre-school nutrition
  - menu labeling
  - weight bias

# Optimal defaults

- Public health examples
  - Trans fat ban in restaurants (NYC)
  - Fluoride in drinking water
  - Airbags
  - No lead paint, gasoline
- Nutrition
  - Healthy choice is easiest to make

# Current nutrition default



***"Don't eat anything your great-grandmother wouldn't recognize as food."***

- ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE [VITAMIN B1], RIBOFLAVIN [VITAMIN B2], FOLIC ACID), SUGAR, CORN SYRUP, SOYBEAN AND PALM OIL (WITH TBHQ FOR FRESHNESS), DEXTROSE, HIGH FRUCTOSE CORN SYRUP, CORN SYRUP SOLIDS, CRACKER MEAL, CONTAINS TWO PERCENT OR LESS OF WHEY, CORNSTARCH, SALT, MILK CHOCOLATE (SUGAR, CHOCOLATE, COCOA BUTTER, MILK), COCOA PROCESSED WITH ALKALI, MODIFIED CORN STARCH, CREAM, HYDROGENATED PALM KERNEL OIL, LEAVENING (BAKING SODA, SODIUM ACID PYROPHOSPHATE, MONOCALCIUM PHOSPHATE), NATURAL AND ARTIFICIAL FLAVOR, GELATIN, DRIED EGG WHITES, SOY LECITHIN, COLOR ADDED, XANTHAN GUM, CARNAUBA WAX, VITAMIN A PALMITATE, DATEM, NIACINAMIDE, REDUCED IRON, RED #40, PYRIDOXINE HYDROCHLORIDE (VITAMIN B6), YELLOW #5, YELLOW #5 LAKE, RIBOFLAVIN (VITAMIN B2), THIAMIN HYDROCHLORIDE (VITAMIN B1), BLUE #1, FOLIC ACID.



# **Marketing to Children**

# Research

- Massive:
  - 15 TV food ads /day
  - 5500 TV messages per year
- 98% of ads promote products high in fat, sugar, and/or sodium
- Not just TV

# Research

- Industry spends >\$1.6b/yr marketing to children and teens
- Relation between TV viewing/higher BMI
  - Specifically due to food ads
  - Children consume 45% more when exposed to food advertising



**Not just TV ads anymore:  
The current default**



Product tie-ins  
and  
integration



Product  
placements

# Mobile marketing



# Social media

The Twitter logo, featuring the word "twitter" in a light blue, rounded, lowercase font with a white outline, set against a light blue background.

**facebook**

Facebook helps you connect and share with the people in your life.



 **delicious**  
social bookmarking

**All your stuff in one place.**

Get to your bookmarks from any computer, anyti



# Internet advertising and advergames

**MILLSBERRY.COM** 1,857 citizens online now | H

**THE CITY** **DOWNTOWN** **ARCADE**

**LOGIN or SIGN UP**

**WELCOME TO MILLSBERRY!**

Millsberry is a town full of millions of kids just like you and me. Here you can create a buddy, design a home, play games, collect rare items and prizes, shop, surf, and learn at the same time.

**CREATE YOUR BUDDY**

Fun things you can do in just a few steps:

- SEND GIFTS AND GREETINGS TO FRIENDS**  
Send A Package
- WIN MILLSBUCKS AT THE ARCADE**

**BECOME A PART OF MILLSBERRY NOW**

**THE TOUR**

**TAKE THE MILLSBERRY TOUR NOW**

**YOU CAN ALSO:**

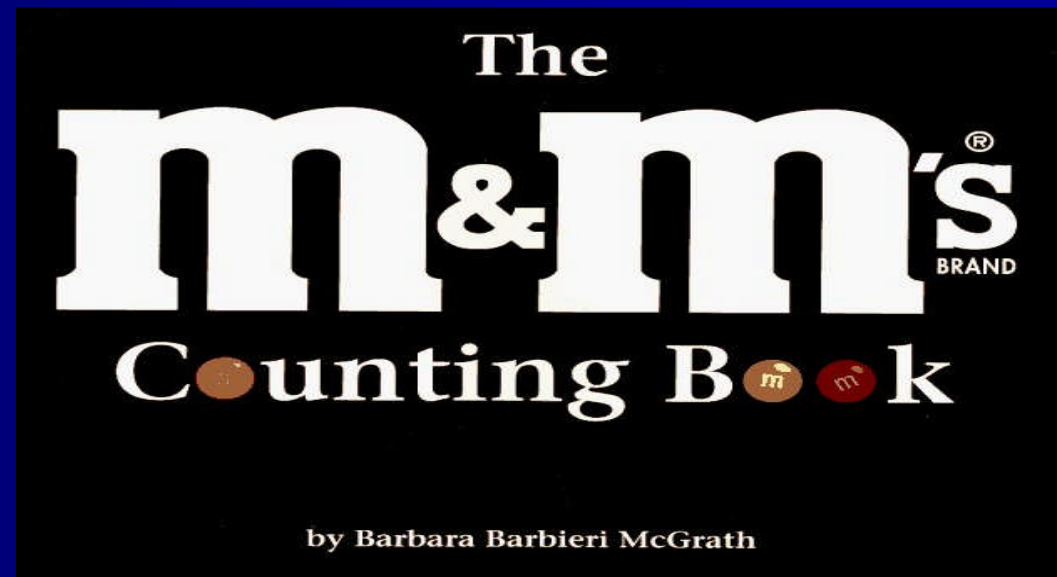
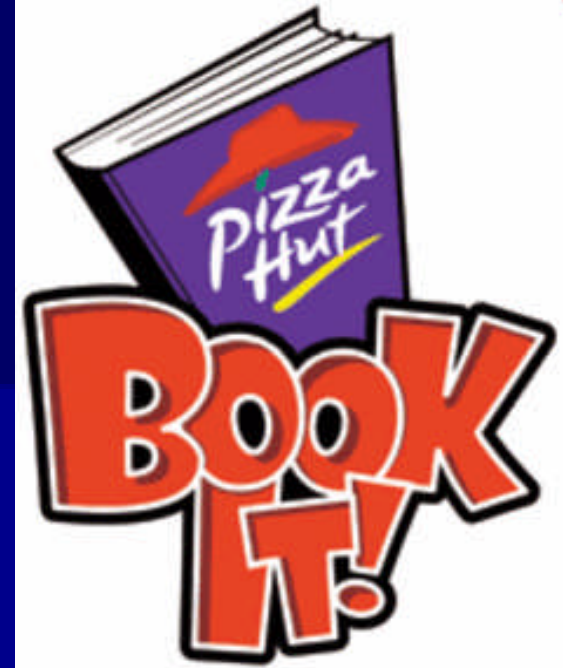
- DESIGN YOUR DREAM HOME**
- MAKE A DIFFERENCE**
- BUY SUPPLIES AND GO FISH!**

**Advertisements:**

- Trix** More games >>
- Lucky Charms** Webisodes >>
- Honey Nut Cheerios** Save the Honey Now >>

# In-store marketing







**Candy is the #1 Fundraiser in America!\***

[illegible]

# DUNKIN' DONUTS Grade A Donuts I am A HOMEWORK STAR

This coupon is good for **two free donuts** (one for the "homework star" and one for the "homework helper") at any participating Dunkin' Donuts in New York City (and surrounding areas), New Jersey, Connecticut (Fairfield County), Philadelphia (and surrounding areas), Delaware, Baltimore, or Washington D.C. (and surrounding areas in Virginia).

**Coupon expires June 30, 2003**



I'm lovin' it

McCAFÉ

FOOD,  
NUTRITION  
& FITNESS

CAREERS

KIDS

HAVIN'  
FUN

ABOUT  
McDONALD'S

GET  
SHOPPIN'

GOOD  
WORKS

Printer-Friendly

Español

Welcome

## McDonald's Educational Resources



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JOIN BOX TOPS | LOGIN | COORDINATORS


**BOX TOPS**  
EDUCATION


the difference  
1 can make.


home learn earn progress share



you can **earn cash for your school** just by clipping the box tops from Pillsbury® products such as:

 look for triple box tops!  
Pillsbury® Cookies


 Pillsbury® Crescents

 Pillsbury® Sweet Rolls

 Pillsbury® Pizza Crust

 **save 50¢ now on Pillsbury® Crescents.**  [GET A COUPON](#)

our kids' schools have earned over **\$300 million** from box tops for education

 **start earning now!**

Enter for a chance to win **50,000 Bonus Box Tops** for your school from Pillsbury®, now through February 28th. [ENTER NOW](#)

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# Box tops for education

## Internet ads



# Rudd Cereal Study

- Reduce harm associated with food marketing to youth
- Reduce exposure
- Product reformulation
- Government oversight
  - *ads*
  - *nutrition*
  - *health claims*



# Key findings

- Least healthy are MOST heavily marketed to children
- 85% more sugar, 65% less fiber, 60% more sodium (vs. adults' cereals)
- Avg *preschooler* sees 642 cereal ads/yr on TV alone, almost all for cereals with worst nutrition rankings
- Research shows children *will* eat low-sugar cereals

# Worst cereal: 41% sugar

- GM markets to children more than any other cereal company
- 6 of 10 least healthy cereals advertised to children made by GM





# Policy

- Ban
  - ALL advertising on school campuses
  - All food/bev ads
  - Ads for foods not allowed to be sold on campus
- Ban sale of non-nutritious foods
- Exclusive contracts: no ads

# Other States

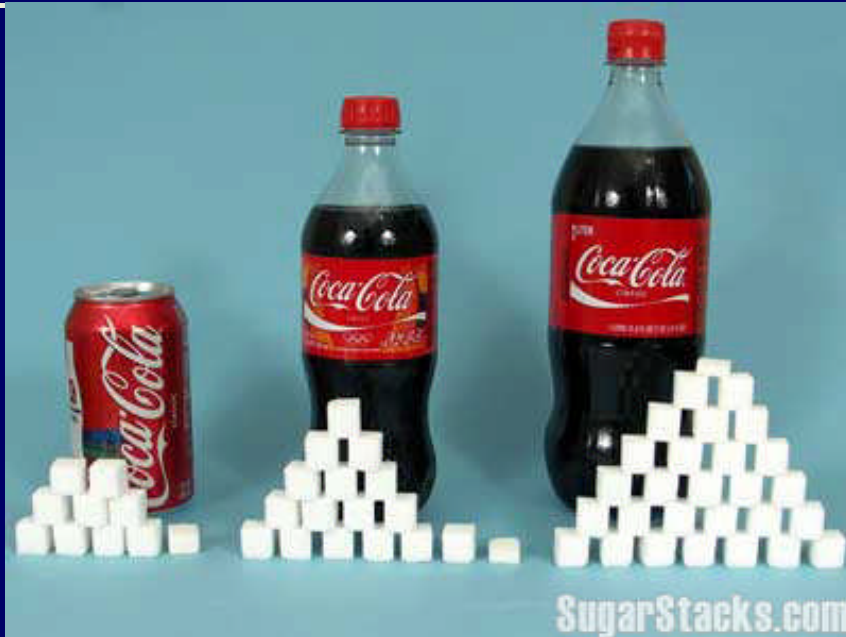
- NC could be the leader!

# **Sugar-Sweetened Beverage Consumption and Taxes**





# Why the concern?



SSBs are the primary source of added sugars in Americans' diets.

# Why the concern?

- Consumption is increasing
  - 1970-2000 per-person consumption of SSBs increased 70% from 7.8 to 13.2 oz
- Avg child = 172 cal/day
- Avg adult = 175 cal/day (NC: 49 gal/yr)

# Links to health problems

- Diet quality
- ***Weight gain/obesity***
- Type 2 diabetes
- Cardiovascular disease
- Dental caries
- Osteoporosis

# Research

- Conflicts of interest

- Industry funding increased likelihood of finding favorable to sponsor by 4- to 8-fold
- Studies funded by food industry reported significantly smaller effects than did non-industry funded studies

- No credible evidence of benefit

# A mechanism

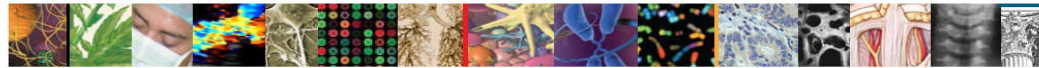
- Sugar in liquid form may be less filling than sugar in solid form
- We do not compensate for extra liquid calories by eating fewer calories from solid food



48 tsps sugar  
~950 cal

# Rudd research/reports

- Meta-analysis
  - clear assn w. increased cal intake/body weight; diabetes
- Price elasticity suggests beneficial impact
  - for every 10% increase in price, consumption decreases 8-10%



*The* NEW ENGLAND JOURNAL *of* MEDICINE

Perspective  
APRIL 30, 2009

## **Ounces of Prevention — The Public Policy Case for Taxes on Sugared Beverages**

Kelly D. Brownell, Ph.D., and Thomas R. Frieden, M.D., M.P.H.

*The* NEW ENGLAND JOURNAL *of* MEDICINE

### **HEALTH POLICY REPORT**

## **The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages**

Kelly D. Brownell, Ph.D., Thomas Farley, M.D., M.P.H., Walter C. Willett, M.D., Dr.P.H.,  
Barry M. Popkin, Ph.D., Frank J. Chaloupka, Ph.D., Joseph W. Thompson, M.D., M.P.H.,  
and David S. Ludwig, M.D., Ph.D.

# **Calls for reducing added sugars and SSBs**

- CDC
- USDA
- IOM
- American Academy Pediatrics
- American Medical Assn
- American Heart Assn
- World Health Organization



# Taxes on SSBs



## Proposal:

- Penny per ounce tax on any beverage with added caloric sweeteners
- Excise: manufacturer/distributor
- Earmarked for obesity prevention



Yale University

# RUDD CENTER FOR FOOD POLICY AND OBESITY

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Home > Revenue Calculator for Soft Drink Taxes

## Revenue Calculator for Soft Drink Taxes

Developed in collaboration with [Frank J. Chaloupka, PhD](#), Professor of Economics, University of Illinois at Chicago.

Taxes on sugared beverages can generate considerable revenue for states, cities, and the nation. This calculator produces expected revenue by allowing the user to list the tax per ounce and the type of beverages to be taxed.

For more information, [email](#) Tatiana Andreyeva, PhD, Director of Economic Initiatives.

Year: 2010

State: --Select-- --or-- City: --Select--

Tax Per Ounce: 1 cent(s) (0.01 - 2.00 cents)

☒ Sugar-Sweetened Beverages ☐ Sugar-Sweetened and Diet Beverages

Calculate

### Basis for Revenue Calculations

- [Bibliography](#)
- [Data and Assumptions](#)

# North Carolina

- Penny per ounce excise would
  - decrease consumption by about 23% to 37.6 gallons (vs. 48.8)
- Revenue:
  - 2010-2012: \$1,381,000,000
  - 2010-2015: \$2,852,000,000

# States/cities proposing

- Arizona
- California
- Colorado\*
- Hawaii
- Massachusetts\*
- Mississippi
- New Hampshire
- New Mexico
- New York
- Tennessee
- Virginia\*
- Philadelphia

# **Improving School Nutrition**

# Current default

- Poor nutrition environment in schools
  - B'fast and lunch programs
- Competitive foods
  - Vending machines
  - A la carte lines
  - Class parties
  - After-school programs
  - Concession stands
  - School stores

# Rudd research

- Wellness Policies
  - 96-item coding tool
  - higher strength scores associated w. better practices

# Research

- School-based food policies DO make a difference
  - Eat school lunch=better nutrition
  - Prohibit fast food in cafeteria=higher NSLP participation
  - High school limits on junk foods: lower BMI



# Rudd research addressing concerns

If ban junk foods:

- Revenue will fall
  - Not substantiated
  - Increased NSLP participation
- Kids will compensate
  - No compensatory increase in snack consumption at home if remove from schools



# Rudd research

- Prompt vs. make available: fruit
  - Prompt: 90% took, 70% consumed
  - Avail: 60% took, 40% consumed

# Policies

- Implement a la carte food standards in middle and high schools
- Increase reimbursement rates: more fruit, veg, whole grains
- All school levels:
  - Ban all types SSBs
  - Only water, milk, juice
  - No chocolate milk

# Policies

- Wellness policies
  - Evaluate state-wide
  - Publicize results
  - Permanent wellness committees

# Policies

- Farm-to-school programs
- School gardens
- Train school food service personnel re: nutrition, cooking skills, obesity



**Improving Pre-school nutrition**

# Pre-schools

- NC: 2640 CACFP centers
- 60% children under 5 avg 29 hours/week in childcare
- 41% spend  $\geq 35$  hrs/week

# Rudd research

- Nutrition/physical activity environment, policies, practices, in CACFP preschools.

## Preliminary findings:

- Heavy consumption: processed, high-fat, and fried meats; full-fat cheeses
- Inadequate intake: fruits, vegs, whole grains



# Policies

- Limit fruit juice consumption; not a substitute for whole fruit
- Only non- or low-fat dairy ages >2 yr
- 100% whole grains w. limited added sugar
- Lunch: must incl. vegetables
- Snacks: fruit or vegetables
- Lean meat only; no fried

# Other States/cities

- California: pre-school nutrition standards bill
- Delaware: 5-2-1-almost none; better nutrition standards
- New York City: new standards



## Premium & Double Stacked Subs

**The Feast**  
Pepperoni, Genoa Salami, Ham, Roast Beef, Turkey & Cheese

Cal	6" Sub	Cal	6" Sub
590	<b>THE FEAST</b>	330	<b>DOUBLE*</b> 5 grams of fat Turkey Breast
520	<b>BIG PHILLY CHEESESTEAK</b>	480	<b>DOUBLE*</b> 7 grams of fat Sweet Onion Chicken Teriyaki
580	<b>PASTRAMI</b>	420	<b>DOUBLE*</b> 8 grams of fat Subway Club®
		630	<b>DOUBLE*</b> Italian B.M.T.®

\*Refers to Premium and DOUBLE STACKED™ subs with at least 4 oz. of meat per 6" sub or 8 oz. of meat per footlong.  
\*DOUBLE refers to sandwich meat content only.

Make Any Premium or DOUBLE\* STACKED™ Sub\*  
(660-1260 cal) A FOOTLONG Add **3.00**

**HOT**  
Cal  
6" sub  
560  
450  
480  
400  
380  
580

**LO**  
Cal  
6" sub  
410  
530  
450  
420  
390  
380

# Menu Labeling

# Rudd studies

*“The recommended daily caloric intake for an average adult is 2000 calories.”*

- 250 fewer calories w. label and statement
- Drive-through: quick strike study
  - nearly 6 in 10 use drive-thru lanes

# Research

- Menu labeling can affect what parents buy for their children
  - McDonald's menu
  - Parents chose meals with avg 100 fewer calories for 3-6 year olds

# Research

- NYC study
  - 12,000 customers
  - Consumed average of 106 fewer calories than those who did not see or use information



au bon pain



# Policy Recommendations

- Calories on menus, menu boards, drive-thrus
- Statement
- Other nutrition information on premises

# NC menu labeling bill

- Develop plan to encourage restaurants to make information available



# States/cities passed

- California
- Maine
- Massachusetts
- New Jersey
- Oregon
- Nashville
- 4 NY counties
- Montgomery Cty MD
- New York City
- Philadelphia
- Seattle/King Cty

# Thank you!

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